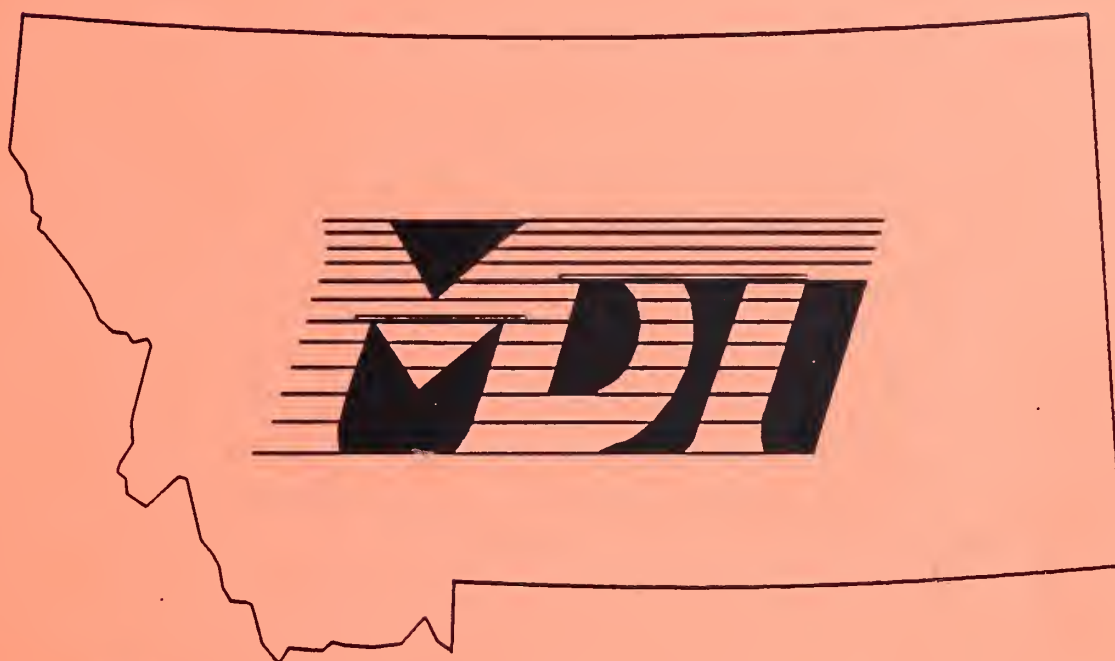
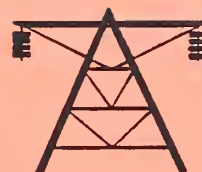


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**MONTANA
DEPARTMENT
OF
TRANSPORTATION**



UTILITY GUIDELINES

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STATE OF MONTANA
GUIDELINE FOR UTILITY OCCUPANCY ON HIGHWAY
RIGHT-OF-WAY
(Prepared by the Utility Section of the R/W Bureau)

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MONTANA DEPARTMENT OF TRANSPORTATION

GUIDELINES FOR UTILITY OCCUPANCY ON HIGHWAY RIGHT-OF-WAY

The following guidelines are for use by the Department and Districts in regulating utility or utility-like facilities that are proposed to occupy highway right-of-way. This document can be used by utility companies and non-utility companies as guidance when proposing to use Highway Right-of-Way. The guidelines are supplemental to the Utility Occupancy Regulations contained in the "Administrative Rules of Montana" 18.7.201 through 18.7.232. These guidelines are only guidelines. The guidelines do not have the force of law. In case of conflict between the "Administrative Rules of Montana" and these guidelines, the "Administrative Rules of Montana" shall take precedence.

For the purpose of these guidelines, occupancy agreements and other permits will be referred to as "Permits."

Guideline Use:

The guidelines are to be used for the occupancy of existing highway right-of-way, independent of a construction project.

The guidelines are also to be used for utility relocations for highway construction projects.

Definition of a Utility:

A utility is defined by State laws, Section 69-3-101 MCA, 69-13-101 MCA, and Sections 35-18-101 through 35-18-503 MCA. In addition, a number of legal opinions and Public Service Commission rulings have further expanded the number of public utilities. When there is a question whether a facility is a public utility, request a legal opinion through the Utility Section.

When Permits/Occupancy Agreements Are Required:

Some of the most common conditions for which permits are required prior to occupancy of highway right-of-way are:

- New installations of utilities or non-utilities.
- Major modification to existing facilities.
- A change in transmittant or increase in operating pressure above that originally approved by the Department.
- Any change in type, function, or physical location of a facility.
- Aerial service connections, accessory equipment or wire substitution or addition to existing poles or to supporting structures crossing any portion of the control access.

When Permits/Occupancy Agreements Are Not Required:

- Normal maintenance operations to keep an existing facility in repair without adding to its physical makeup or changing its functional capacity. The owner must notify the District prior to performing normal maintenance. In case of an emergency, the District must be notified after the emergency repair is made.
- Substituting wires, which does not increase capacity.
- Installing additional capacity in existing conduit systems that does not change the nature or operational conditions of the original facility. A RW 20 Encroachment Permit must be submitted when installing cable TV facilities within an existing telephone conduit.
- Replacing a pole in the same location of a pole removed for maintenance purposes.

Utility Installations on Future Construction Projects:

When a utility company requests to occupy existing highway right-of-way with its facilities where a future construction project is proposed, no consideration should be given for the future highway construction project unless construction limits and the right-of-way are designed. Where construction limits and right-of-way are not designed the utility should be issued an occupancy agreement (RW 131). Where the construction limits and right-of-way are defined, the utility should be advised to design and install the facility free from conflict.

Non-Use:

The guidelines and permits are not to be used when the proposed occupancy is of Department-owned property which is not highway right-of-way, such as excess property or a maintenance yard. In these cases of proposed occupancy, consult the Right-of-Way Land Section.

Public Properties, Tribal Lands and Railroad Easements:

When a utility proposes to locate its facility within highway right-of-way that is owned by Forest Service, B.L.M. or Tribal Lands, the utility must submit the appropriate permit/occupancy agreement to the Montana Department of Transportation's District Office and contact the owner of property to make applications for right-of-way permits. State Lands granted the Montana Department of Transportation the right to issue permits where Montana Department of Transportation's highway right-of-way is on State Lands by easement.

When the Department of Transportation occupies right-of-way by easement from a private property owner or a railroad, a utility has a right to occupy the easement area as if the Department of Transportation owned the property in fee. However, the applicant should contact the fee owner to advise of the proposed occupancy.

It is the applicants obligation to determine ownership.

Use of the Occupancy Agreements/Permits:

Encroachment Permit (RW 20) is used for:

- Non-utility facilities;
- Utility facilities where the following applies:
 - A utility requests to occupy an area of the right-of-way other than the outer edge for the convenience of the utility;
 - If a utility does not install a facility in accordance with the conditions of the permit issued, an encroachment permit can be issued instead of requiring the utility to relocate the facility. (i.e., a utility placed a facility 10' from the R/W where the permit required placement 5' from the R/W).
- Occupancy of highway right-of-way by a non-utility.
- Locked gates installed in a interstate highway access control fence.
- Proposed new railroad track across a roadway where the railroad company does not own the right-of-way.

Structure Attachment permit (RW 20S) is used for:

- The attachment to a highway bridge;

All structure attachment permits must be approved by the Bridge Bureau.

NOTE: The RW 20S should only be issued for the structure attachment. A RW 131 agreement is issued for utility installation at the approaches to the structure.

Utility Occupancy and Location Agreement (RW 131) is used for:

- All legitimate uses of highway right-of-way by a utility facility.

Common Use Agreements (RW 133) are used when:

- A utility facility holds an easement or other instrument and the Department purchases the right-of-way over utility easement area; and
- The utility is essentially relocated within the same utility easement area for a highway construction project.
- The utility is not relocated and will occupy the same utility easement area for a highway construction project.
- The common use permit is completed by the applicant and submitted to the District for processing. The District must submit a common use permit to the Utility Section for processing.

Environmental Checklist:

A completed environmental checklist must accompany each permit/occupancy agreement issued.

The applicant is responsible for completing the checklist, obtaining all applicable permits/occupancy agreements and adhering to the conditions of the environmental checklist and applicable laws. When the applicant checks a "yes," the mitigation measures proposed must be attached to the checklist. In these cases, the applicant should be made aware that there will be a delay in processing the permit/occupancy agreement.

The utility agent is responsible for reviewing the checklist for completeness. When the utility agent is aware of a possible impact in connection with a proposed installation on highway right-of-way, the permit, environmental checklist and an explanation of the possible impact must be submitted to the Environmental Services. If the utility agent becomes aware of a potential environmental impact during the installation of a facility, the applicant should cease work, and Environmental Services should be contacted.

Montana Department of Transportation Planning Division must review and approve the environmental checklist which must accompany a R/W 20 Encroachment Permit that may result in significant and permanent impacts to the transportation network in terms of substantial increased in traffic volumes, weight or delays on state roadways (i.e., major mines greater than five acres, railroad at grade and above-

grade crossings, strip mines, road relocations, major traffic generators such as a discount store or mall) or other impacts on other forms of transportation such as rail, transit or air movements.

If the applicant checks "yes" in any one box the utility agent must:

- Not approve the permit.
- Not permit the utility to begin work.
- Send the checklist and permit to Environmental Services for further action.
- When items 7 or 8 are checked on an environmental checklist for an encroachment permit, send a copy of the checklist and permit to the Planning Division for further action.

Occurrences to Avoid:

- Do not authorize draining a wetland either on to or off highway right-of-way.
- Do not permit disturbance of an archaeological or historical site.
- Do not permit the installation of overhead facilities through a scenic strip, overlooks, rest areas, recreational areas, or adjacent highway right-of-way to these areas.
- Do not permit an installation through a hazardous waste area.
- Do not permit an installation that may disturb a nesting area of an endangered species.
- Do not permit an installation that is part of a much larger project including other state agencies.
- Require a raper proof design for overhead electrical installations.

Discovery of Unknown Hazardous Materials:

If the Utility discovers hazardous material (i.e., asbestos, PCB's, petroleum, PCP's, hazardous waste or radioactive material, etc.) the existence or location of which was previously unknown to the Department and the Utility, the Utility must immediately stop work in that area and immediately notify the District Administrator/Engineer.

Approval Process:

The applicant must submit the appropriate permit, environmental checklist and a plan view (preferably on highway plans) of the proposed occupancy to the respective District office. The plan must show the following:

- the type of installation, i.e., 200 pair telephone,
- distances from centerline and distances to the right-of-way,
- stations, mileposts, and
- distance from existing utilities.

If the installation is not started within one (1) year after the permit is issued, the applicant is required to submit another permit for approval.

The Department should act on the permit within 30 days of receiving it.

Denial of a Permit/Agreement:

Denial of a permit should be based on sound engineering judgement and the guidance of the Administrative Rules or these guidelines. The applicant should have an opportunity to re-submit the application after making the required corrections.

Installation of Aboveground Facilities Such as Cabinets, Poles, Huts:

A public utility can install an aboveground facility within highway right-of-way, as long as the facility does not incommode or endanger the public in the use of the roadway and the facility does not hinder maintenance of the roadway. Such facilities can include cabinets, huts, poles, closures, etc.

As a general rule, the Department's position is that a utility has a right to place aboveground facilities within highway right-of-way, however, the Department has the right to determine where the facilities can be placed.

The installation of aboveground facilities of a non-utility is at the discretion of the District, but should be avoided.

Encasements:

The Department does not usually require encasements of utility facilities under the roadway. The following are installations where encasements should be considered:

- Protection for carrier pipe from external loads or shock, either during or after construction of the highway.
- As a means of conveying leaking fluids away from the area directly beneath the traveled way to a point of venting. The utility company shall immediately repair the leak and clean up the affected area.
- Less than the minimum required depth.
- Near footings of bridges or other highway structures.
- Across unstable or subsiding ground.
- Pressurized carrier pipes. Encasement of waterlines is generally not required.
- Carriers of transmittants which are flammable, corrosive, expansive, energized, or unstable, particularly if carried at high pressure.

Occupancy of Non-State Maintained Secondary Road Right-of-Way:

The permitting requirements for county-maintained secondary roads is the responsibility of the county. The counties should be urged to adopt and abide by the Department standards for utility and non-utility installations.

Occupancy by a Non-Utility:

Longitudinal occupancy of any right-of-way by non-utility is contrary to Department policy.

Cable television facilities, because they perform a public service, are allowed to occupy highway right-of-way longitudinally under an encroachment permit. When longitudinal occupancy is permitted, the cable company must meet all of the conditions required for a utility occupancy, including placement and traffic control.

Occupancy by a non-utility is by encroachment permit only.

All other conditions of the guidelines are applicable to non-utility occupancy.

Occupancy of Limited Access Facilities:

Utilities and non-utilities can occupy limited access right-of-way in the same manner as a secondary or primary right-of-way.

Clear Recovery Area:

Clear recovery area is defined as a minimum of 12.8 meters (42 feet) from centerline on unpaved roads, and 9.2 meters (30 feet) from the outer edge of the outside-traveled lane on paved roads, or the clear zone, whichever is greater.

Raptor-Proofing:

All electrical overhead installations located within highway right-of-way shall be raptor-proofed.

Exceptions for facilities located in urban areas must be approved by the Environmental Services.

A raptor design must accompany the permit.

The utility, not the Department, determines design for adequate raptor-proofing.

Occupancy of Full Controlled Access Facility (Interstate):
Occupancy of a full controlled access facility is contrary to Department policy. For exceptions see Administrative Rule 18.7.204.

The occupancy must be approved by the Utility Section of the Right-of-Way Bureau and the FHWA.

No aboveground facility (poles, fixtures, etc.) can be installed within the controlled access.

Crossings of a full controlled access facility is permitted. Servicing of the facility must take place from outside the controlled access.

Underground and aerial facilities may be installed within the crossroad right-of-way.

Attachment to structures on crossroads over the full controlled access facility is permitted provided the conditions of "structure attachments" is met.

Overhead Crossings of a Full Controlled Access Facility (Interstate):

- Should be at right angles to the roadway.
- Should have 6.4 meters (21 feet) of clearance over the roadway.

- No pole guys, etc., can be installed within the controlled access right-of-way unless approval is secured by the Utility Section of the Right-of-Way Bureau and the Federal Highway Administration.
- Aerial power or communication lines will not be permitted to cross over bridges where it is possible to avoid such installations. Where an aerial facility is permitted near a structure, a minimum vertical clearance of 7.5 meters (25 feet) will be maintained from the top of the bridge rail. A horizontal clearance of 7.5 meters (25 feet) will be maintained from the neat lines of the structures.

Overhead Installations-Longitudinal (Other than Interstate):

Rural

All overhead installations should be installed at the right-of-way line.

All aboveground fixed objects, including downguys, should be installed outside of the clear recovery area, unless the following occurs:

- They are installed behind guardrail or other protective devices. Minimum installation distance behind guardrail is .6096 meters (2 feet). A greater separation may be required for deflection.
- They are installed in a location where a vehicle cannot reach the facility, such as on a cut slope.

Exceptions to the clear recovery area can be granted by the District Administrator/Engineer for small sections of line. Some examples are as follows:

- For small segments of aboveground installations which would cause misalignment of a pole line.
- To avoid excessive tree cutting.

Urban

Overhead facilities should be installed at the outer edge of the right-of-way, behind the sidewalk, or a minimum of .6096 meters (2 feet) behind the face of the curb.

Overhead Crossings (Other than Interstate):

- Should have a minimum of 6.4 meters (21 feet).

- Should be at right angles to the roadway.
- Aerial power or communication lines will not be permitted to cross over bridges where it is possible to avoid such installations. Where an aerial facility is permitted near a structure, a minimum vertical of 7.5 meters (25 feet) will be maintained from the top of the bridge rail. A horizontal clearance of 7.5 meters (25 feet) will be maintained from the neat lines of the structures.

NOTE: Overhead crossings installed because of a construction project, whether power or communication, should have a minimum clearance of 6.4 meters (21 feet).

Open Trench Roadway Crossings - (For Roadways Other Than the Interstate System):

Open cut of a roadway is permitted only when it is demonstrated to the District's satisfaction that pushing or boring is impracticable. The following are some of the requirements:

- The open trench shall be filled, compacted and traversable by traffic before the end of the work shift unless approved by the District Administrator/Engineer.
- A traffic control plan is approved by the District prior to work.
- The District is notified 48 hours in advance of the work, and a 12-hour notification is given if this date is changed.
- Prior to removal, the asphalt shall be square cut at least .3048 meters (1 foot) beyond the edge of the trench.
- Square cutting of the asphalt may be necessary a second time if the asphalt is undercut or damaged by the installation.
- Sidewalks are to be sawed from joint to joint.
- The utility company shall store the excavated material so as not to interfere with traffic (clear zone), approaches, side streets, or fire hydrants.
- All backfill shall meet the following requirement except when other methods are specified for certain types of installations such as non-shrink backfill.
 - a. Backfill material shall not contain sticks, sod, or deleterious material.

- b. Backfill material shall be placed in maximum six-inch loose thickness layers and compacted. All backfill material will be compacted.
- Each layer of material shall be compacted using the quantity of water required to reach a minimum of 95% density of the material being compacted.
- The Department may take soil density tests, or require the utility to provide testing (at utility expense) and furnish the District the results.
- Non-shrink backfill can be required in the place of conventional compacted backfill.
- The replacement surfacing shall have the same thickness and strength as the surfacing removed, but not less than 101.6 millimeters (4 inches) of asphalt and 203.2 millimeters (8 inches) of 38.1 millimeters (1½ inches) in diameter gravel. The gravel course can be waived when non-shrink backfill is used.
- The gravel shall have optimum moisture and compacted to 95% proctor density or the satisfaction of the Department.
- The asphaltic hot mix shall be placed and compacted to match the existing pavement grade so as to leave no noticeable dip or depression. Areas under traffic will be paved the same day that they are excavated, except for special cases approved by the District.
- The Department has the right to require seal coating to restore original surface conditions.
- A tack coat should be applied to all edges of the existing asphalt prior to patching and between lifts of asphalt.
- The asphalt shall be replaced as soon as possible. When weather conditions do not permit, cold mix can be used and replaced with hot asphalt when available.
- The permittee will be responsible for maintenance of the patch for one (1) year from the installation date. If the permittee does not perform the repair within 30 days of notification, the Department may make the repair and charge the permittee.

Non Shrink Backfill

May be required in place of conventional backfill methods.

- Should be poured to the surface.

- Allowed to set a minimum of three (3) hours curing time prior to allowing traffic.
- 101.6 millimeters (4") removed prior to patching.
- Should be of a consistency to fill the voids without excess water.
- Requires no tamping or vibrating.
- Use the following non shrink formula:

<u>Ingredients.</u>	<u>Weight/C.Y.</u>
Cement - 0.45 sack	42 lbs.
Water - 39 gallons*	325 lbs.
Air (entrapped) - 1.5%	
Course Aggregate	
(1" max. - size 57	1700 lbs.
Sand (ASTM C-33)	<u>1845 lbs.</u>
	3912 lbs.

*Note: Start with 30 gallons of water or less and add more if necessary.

Bored, Pushed or Trenchless Technology Crossings:

- All crossings should be 1.0668 meters (42 inches) below the ditch line.
- Boring pits should be 3 meters (10 feet) from the shoulder.
- Crossings should be at right angles to the roadway.

Heavier gauge/strength pipe should be considered for uncased petroleum products pipelines and high pressure natural gas lines at highway crossings.

Consideration should be given to providing encasement for carriers of transmittants which are flammable, corrosive, expansive, energized or unstable substances.

Longitudinal Installation of Underground Facilities:

Rural

- No facility shall be placed under the asphalt without the approval of the District Administrator/Engineer.
- All facilities shall be placed near the right-of-way line.
- The first facility should be placed within 1.5 meters (5 feet) from the right-of-way line.

- Additional facilities should have no more than a 1.2 meter (4-foot) separation.
- All aboveground facilities, such as vent pipes, or closures, should be placed at the right-of-way.

Any facility which cannot be detected from above-ground should have a tracing wire on or near the facility.

If there are extraordinary circumstances, such as a cliff, river or heavily wooded area, a facility may be placed between the right-of-way and the roadway shoulder for short distances. The District may require the following:

- Extra depth.
- The installation be placed in conduit.
- Aboveground marking where the facility angles toward and leaves the shoulder.
- A concrete cap.

Where it is possible to place the facility near the right-of-way and the utility requests to place the facility closer to the shoulder, an Encroachment Agreement (RW 20) should be issued.

Where it is impossible or impracticable to place a facility near the right-of-way and the utility must be located nearer the roadway shoulder, an Occupancy Permit (RW 131) should be issued.

Urban

- The facility should be placed on the backside of the sidewalk, or curb where possible.

Where the facility is installed in the street or roadway, it should:

- Be placed in conduit.
- Be a minimum of 762 millimeters (30 inches) deep.
- Manholes and valve boxes should be located outside of the wheel path.
- Manholes should be placed where entrance to the manhole for maintenance will not obstruct traffic.

Fiber Optic Cable:

- Should be placed within 1.5 meters (5 feet) of the right-of-way, regardless of other underground facilities in place, unless authorized by the District Administrator/Engineer.
- Should be placed 1.0668 meters (42 inches) deep, unless the District waives the provision.
- Must have a warning tape 457.2 millimeters (18 inches) above the cable.
- Aboveground markings should be in at least 152.4-meter (500-foot) intervals and at all crossings.

Natural Gas, Electrical and Communication Installations:

- Should be placed a minimum of 762 millimeters (30 inches) deep.
- For location, see urban and rural installations.

Water and Sanitary Sewer Installations:

- Should meet current Montana Public Works Standard Specifications for water and sanitary sewer installation.
- Water pipes should be installed deep enough to avoid freezing problems under the roadway.
- Hydrants should be installed a minimum of 609.6 millimeters (2 feet) behind the face of the curb. See Montana Public Works Standard Specifications Standard Drawing No. 02718-3 if sidewalk is present.
- Valve boxes should be located outside of the wheel path. For location, see urban and rural installations.

Petroleum Products and High Pressure Pipelines:

- Should be placed 1.0668 meters (42 inches) deep, unless the District waives the provision.
- Aboveground markings should be placed at least 152.4-meter (500-foot) intervals and at all crossings.
- Vent pipes must be located at the right-of-way line.

Traffic Control and Safety:

The Montana Department of Transportation's traffic control handbook should be used as a reference for most utility installations and utility maintenance operations within highway right-of-way. Part VI of the MUTCD contains the national standards for work zone traffic control.

A traffic control plan should be approved by the District for unusual operations, such as an open cut crossing.

All material stored on highway right-of-way should be located outside of the clear recovery area, or a minimum of 9.2 meters (30 feet) from the outside edge of the outer driving lane, or the clear zone, whichever is greater.

All equipment not in use should be located the same distance from the roadway.

Open trenches within the clear zone must be either covered or protected at the end of the work shift. Open trenches in populated areas must be protected with a temporary fence or other barriers.

Trench spoils should be either placed far enough from the driving lane, leveled, or protected so that it is not a hazard.

Equipment working near the roadway should have visible amber flashing lights.

Cleanup and Restoration:

Cleanup of the installation shall be to an original-like condition.

Drainage:

- No facility may be installed in a drainage culvert.
- Stockpass/grade separation structures can be used for roadway crossings by utility facilities.

Blasting:

- Blasting is prohibited unless approved by the District Administrator/Engineer.
- Blasting is prohibited around highway structure footings.

Herbicides:

The use of chemicals to control foliage is prohibited without the approval of the District.

The utility must reseed any disturbed ground with the approved seed. The utility is required to obtain a seeding plan from the appropriate county extension office. The utility will be required to control noxious weeds for two years from the date of installation.

Attachment to Highway Structures:

Attachments to highway structures are by encroachment permit and must have the prior approval of the Bridge Bureau. (The approach to the structure for a proposed utility attachment to a structure is by R/W 131-Occupancy Agreement.)

Structure attachments shall be submitted on a Structure Attachment Permit (RW 20S), with sufficient detailed drawings to indicate the method of attachment, inside diameter, outside diameter, pipe weight per foot, working pressure, type of coating, substance carried, pipe material and any other information required in the structure attachment guidelines.

Attachments to existing structures in place prior to the effective date of these rules are considered to be in compliance with this rule, provided:

- The owner shall inspect the attachment annually and shall repair any deficiencies. The owner shall maintain a record of the inspections for three years.
- If the attachment is not currently permitted by a structure attachment permit, the owner shall submit an application for a permit and drawings to the appropriate district office for approval under these rules within six months of the effective date of these rules.

Proposed Attachments to Existing Structures:

Where it is feasible and reasonable to locate utility facilities elsewhere, attachment to highway structures will not be allowed. Where other locations create undue hardship for the installation of the facility, consideration will be given to attaching the utility facility to a highway structure. The following conditions will apply:

- All utility facilities attached to structures shall be attached as provided in the rules unless written approval to do otherwise is granted by the Department's bridge engineer.

- Attachments to structures shall be inspected by the owner at least once per year and the owner shall repair any deficiencies immediately. Records of the inspections shall be maintained by the owner for a minimum of three years.
- Attachment to longitudinal structures on a full control access facility system generally will not be permitted except to exclusively serve a highway facility. Attachments to existing structures crossing the full control access facility will be considered on a case-by-case basis.
- The attachment method shall conform to engineering standards for preserving the highway, its safe operation, maintenance and appearance.
- Attachment of a utility facility will not be permitted unless the structure can support the additional load, and accommodate the utility facility without compromising highway user safety and convenience, and the attachment does not impair bridge inspection or maintenance.
- Manholes will not be allowed in the driving lanes of a bridge deck. Where the structure has a minimum shoulder width of 3 meters (10 feet), manhole access through the deck in the shoulder area may be allowed within the discretion of the Department.
- The utility attachment will be installed on the bridge in a manner which will not reduce the vertical clearances above river, stream, pavement or top of a rail.
- Utility attachments to the outside of a structure that is located within 400 meters (440 yards) of a residential structure, park, fishing access site, or other recreational facility will not be permitted. A residential structure is any building intended for human occupancy, including businesses. This provision may be waived by the District Administrator/Engineer if the utility can demonstrate the provision will place an economic hardship on the utility and that the design and attachment of the facility will not detract from the aesthetics of the structure. In other areas where, in the opinion of the District Administrator/Engineer, bridge aesthetics are not a particular concern, a utility may be attached to the outside of the structure. Utilities attached to the outside of the structure will be on the downstream side.
- Utility facilities shall be firmly attached to the structure and where necessary padded to eliminate noise

and abrasion due to vibrations caused by wind or traffic.

- The installation of a utility through the abutment or wing wall of an existing structure shall not be permitted.
- In locations where a utility attached to a structure is carried beyond the back of the abutment, the utility shall curve or angle out to its proper alignment outside the roadbed area within the shortest possible distance from the abutment.
- So long as utility facilities comply with the other conditions set forth in these rules such a facility may be attached to structures by hangers or roller assemblies suspended from inserts in the underside of the deck or from hanger rods clamped to a flange of a superstructure member.

Bolting through the deck or concrete beams shall not be permitted.

Welding of attachments to steel members or bolting through such members shall not be permitted.

The use of driven anchors using the explosive type drilling force shall not be permitted.

Drilling in pre-stressed concrete beams shall not be permitted.

Attachments of utilities facilities to bridge handrail or guardrail or their anchorage systems shall not be permitted.

Attachment of pipelines carrying deleterious or corrosive substances shall not be permitted.

- The design of a utility attachment to a highway structure shall include provisions acceptable to the Department for lineal expansion and contraction due to temperature changes. Line bends or expansion couplings may be used for this purpose.
- Each proposed bridge attachment will be considered on a case-by-case basis by the Department.
- Trenching in the vicinity of piers, bents or abutments shall be a sufficient distance from footings to prevent undercutting or material from sloughing from under the footing.
- An application which involves the reduction of existing waterway area shall not be permitted.

- Utilities attached to bridges shall not be maintained from the bridge deck without the prior approval of the Department's District Administrator/Engineer.
- Utility facilities shall not be attached to bridges on or eligible for listing on the National Register of Historic Places without written consent of the State Historic Preservation Officer.
- By accepting the occupancy permit, the owner of the utility facility shall be fully liable to the Department, or others, for any damage to the structure, or the surrounding environment, caused by the placement and use of the facility on a highway structure. If the structure is damaged by the utility facility, through negligence or otherwise, so that the structure cannot be used by the traveling public, then the utility must pay all costs to repair the structure, and associated costs.
- The Department shall not allow any new attachments to a highway structure by petroleum, natural gas, or other products pipelines in seismically active areas (those areas where the anticipated acceleration coefficients due to an earthquake exceed 10% of gravity) unless the structure has been retrofitted or built in conformity to the Department's seismic requirements since January 1, 1992. The Department may waive this requirement if the Department determines that the structure is adequate for the seismic area within which it is located.

Proposed Attachments to New Bridge Structures:

Where the Department plans to construct a new structure, the design of the structure will, upon request of a utility company, be reviewed by the Department's Bridge Bureau for accommodation of existing or proposed utility installations consistent with the requirements set forth herein. The utility company may be required to reimburse the State for additional design and construction costs associated with accommodating the utility facility on the new structure.

Installation of a utility facility on a new structure shall be coordinated with the bridge construction so as not to interfere with the operations of the highway contractor.

The applicant shall submit complete plans and specifications of the proposed installation, including the weight per linear meter (foot) and detail drawings to the Department prior to the Department's completion of plans and specifications for the proposed structure.

Utility facilities may be installed through freestanding bridge abutments, but shall not be permitted through abutments or bents that are expected to move as the thermal expansion and contraction affects the bridge. The hole created in the bridge abutment must be of the minimum size necessary to accommodate the utility and it shall be sleeved to permit relative movement between the abutment and utility.

Pipelines:

At the option of the utility, pipelines must be attached to a highway structure by one of the following methods:

- The carrier line shall be encased throughout the length of the structure and the casing shall be carried beyond, but not through, the bridge abutments and shall be effectively opened or vented at each end. The casing shall be designed to withstand the same internal pressure as the carrier pipe; or
- The carrier line may be attached to the structure unencased using the following design factors:

Class Location 1	0.50
Class Location 2	0.40
Class Location 3	0.33
Class Location 4	0.27

The design factor specified shall be obtained in accordance with the equations set forth in 49 CFR 192 by any combination of wall thickness and/or pipe yield strength that will provide the required design factors. If the design factor is obtained by increasing steel strength, the utility shall provide certification at the time of installation to the department that the pipe, in fact, meets the strength requirements in the design calculations.

The carrier pipe shall be pressure tested before start-up in accordance with the latest edition of applicable industry codes, as well as the applicable statutes and regulations.

The attachment shall be designed to prevent any discharge from damaging the structure or reaching the waterway in the event of a rupture. That capability shall be demonstrated to the satisfaction of the department's bridge engineer prior to approval of the attachment.

Pipelines using bridge members to resist forces generated by fluids in motion shall not be permitted.

The following information shall be included in the application: outside diameter, inside diameter, pipe

material, actual working pressure, substance carried, type of coating, and any other information requested by the department.

Pipelines attached to highway structures shall be electrically isolated from the structure.

Pipelines shall be attached to provide sufficient clearance for convenience and safety during maintenance and repair of the structure or other utility attachments on the structure. The pipeline shall be located to minimize the possibility of damage from traffic. Pipelines shall include the capability to allow for expansion and contraction of the structure and the pipeline.

Power and Communication Lines:

Electric power and communication conductors attached to a highway structure shall be insulated from the structure, and carried in protective conduit or pipe throughout the structure. Exposed metallic conduit shall be grounded on each end. Where metallic conduit is installed within 2 meters (7 feet) of any metal parts of the structure which are readily accessible, including, but not limited to, railings, platforms, or stairs, the metallic conduit shall be bonded to the metal parts of the structure. When bonding, all sections of the structure shall be bonded to the metallic conduits.

Electrical power and communication lines shall be attached to provide sufficient clearance for convenience and safety during maintenance and repair of the structure or other utility attachments on the structure. The conduit shall be located to minimize the possibility of damage from traffic. Conduits shall allow for the expansion and contraction of the structure.

Attachments shall comply with the National Electrical Safety Code and applicable regulations.

Metallic conduit attached to structures that are cathodically protected shall meet all of the above requirements and shall not adversely affect the cathodic protection of the structure, i.e., insulate the conduit from the soil and use anodes at each end for grounding. Method to be used shall be approved by the department's bridge engineer on a case by case basis.

Bridge Clearances:

Aerial power or communications lines will not cross over bridges where it is possible to avoid such installations. This is necessary to allow the department sufficient room to operate equipment to maintain bridges. Lateral clearance

from a bridge will be sufficient to allow construction and maintenance of the bridge structure. A minimum vertical clearance of 7.5 meters (25 feet) from the top of the bridge rail will be maintained. A horizontal clearance of 7.5 meters (25 feet) will be maintained from the neat lines of the structures.

Materials:

All attachments to structures shall be constructed from durable materials designed for long service life and be free from routine servicing or maintenance. All materials shall conform to current applicable industry specifications and codes.

All steel materials used in attaching a utility conduit to a structure shall be stainless or galvanized.

Materials used for attaching a utility facility to the structure shall be compatible with the structural material to eliminate the possibility of corrosion.

FOR INTERPRETATION OF THE GUIDELINES CONSULT THE DISTRICT UTILITY AGENT OR THE UTILITY SECTION OF THE RIGHT-OF-WAY BUREAU.

District 1

Montana Department of Transportation
2100 West Broadway
P.O. Box 7039
Missoula, MT 59807-7039 Tel: (406)523-5800
Kalispell Office Tel: (406)755-5717

District 2

Montana Department of Transportation
Wynne & Lowell
P.O. Box 3068
Butte, MT 59702-3068 Tel: (406)494-3224
Bozeman Office Tel: (406)586-9562

District 3

Montana Department of Transportation
104 - 18th Avenue N.E.
P.O. Box 1359
Great Falls, MT 59403-1359 Tel: (406)727-4350

District 4

Montana Department of Transportation
503 North River Avenue
P.O. Box 890
Glendive, MT 59330-0890 Tel: (406)365-5296

District 5

Montana Department of Transportation

424 Morey

P.O. Box 20437

Billings, MT 59104-0437 Tel: (406)252-4138

Helena Headquarters

Montana Department of Transportation

R/W Bureau-Utilities Section

2701 Prospect Avenue

Helena, MT 59620-1001 Tel: (406)444-6080

REF:WS:Q:RW:0001:517.kmc

UTILITY OCCUPANCY
AND LOCATION AGREEMENT

Route _____
Date Submitted _____ Agreement No. _____
Date Approved _____ Highway Project No. _____
Designation. _____
Control No. _____
Applicant/Utility _____ Address: _____
City: _____ State: _____
Telephone: _____

- 1) Overhead facilities: Size _____ Type _____
- 2) Underground facilities: Size _____ Type _____
- 3) Other _____

Location

- 1) Longitudinal: _____ meters(feet) from N - S - E - W R/W line from
Milepost (Station) _____ to Milepost (Station) _____
- 2) Centerline crossing(s) at Milepost (Station) _____
- 3) Downguys not in parallel with the roadway at Milepost(s) _____
- 4) Section _____, Township _____, Range _____, County _____

This installation is subject to compliance with the Administrative Rules of Montana 18.7.201 through 18.7.232, the Utility Occupancy Guidelines and the following requirements:

Construction Prints

Prints are attached and incorporated by this reference. (Highway prints preferred) Distances from R/W line, centerline and existing utilities, to the proposed installation must be provided.

The utility will notify the District Utility Agent in _____, telephone _____, at least 48 hours in advance of any work detailed in this Agreement, except for emergency situations. After completing the work, the applicant must submit a Form R/W 131-B (attached) for approval.

- (1) The State shall not be liable to the general public for any injury to or death of any person whomsoever belonging when such injury, death, loss or damage arises out of or results from the construction, maintenance, or repair of existing or future utility facilities located within the highway right-of-way, or the installation or operation of such utility facilities within the highway right-of-way, regardless of whether or not the Department has expressed or implied approval of the construction, maintenance, repair, installation or operation of such facilities within the highway right-of-way.
- (2) This approval is granted with the understanding the installation will be made according to the plans as submitted. Field revisions may only be made with the approval of the District Administrator or designee. If the installation is not made as shown on the plans or approved amendment, the Department, at its discretion, may require the removal of the installation.
- (3) Any attachments to this agreement, including but not limited to Right-of-Way Form RW 131-B, are hereby incorporated by reference.
- (4) Additional Requirements _____

Utility _____
By _____
Print Name _____
Title _____

STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION

Approve _____ Disapproved _____ By: _____ Date: _____
Date Date Title: _____

ENVIRONMENTAL CHECKLIST

THE FOLLOWING DOES NOT APPLY TO UTILITY RELOCATIONS RELATED TO HIGHWAY PROJECTS

IMPACTS ON THE PHYSICAL ENVIRONMENT (To be completed by Applicant)		
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES (Use attachments if necessary)	
	Yes	No
1. Does the proposed action have an impact on any cultural resources? (Section 106-NHPA) *	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the proposed action have an impact on water quality? *	<input type="checkbox"/>	<input type="checkbox"/>
3. Does the proposed project have impacts to wetlands? *	<input type="checkbox"/>	<input type="checkbox"/>
3a. If the answer to number 3 is yes, is a Clean Water Act § 404 permit authorization required?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there documented controversy on environmental grounds? (For instance, has the applicant received a letter or petition from an environmental organization?)	<input type="checkbox"/>	<input type="checkbox"/>
5. Does the proposed project involve hazardous waste site(s)? (Superfund, spills, underground storage tanks, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed installation a portion of a project which may require other governmental permits, licenses, assessments, etc.? If the answer is "yes," please describe in general the full extent of the project and any other permits, licenses, assessments, etc., which may be necessary for the utility to acquire. (Use attachments as necessary.) (Excludes 404 permits)	<input type="checkbox"/>	<input type="checkbox"/>

* If the answer to 1 is "yes," please see the first four categories on the bottom of this page in order to address mitigation measures. If the answer to 2 or 3 is "yes," please see the Five Categories of Mitigation on this page in order to address mitigation measures.

7. What will the proposed utility installation service? (for example a shopping mall of fifty business, a subdivision of 100 lots). Information only. This item does not require an action by the utility company.
8. Magnitude and significance of potential impacts: To be completed by applicant by separate attachment

Checklist prepared by:

	Applicant	Title	Date
--	-----------	-------	------

Reviewed for completeness by:

	MDT District Representative	Title	Date
--	-----------------------------	-------	------

Approved by:

	Environmental Services (when items 1, 2, 3, 4, 5 or 6 are checked "Yes")	Title	Date
--	---	-------	------

- A. The applicant shall complete the checklist indicating a "Yes" or "No" for each item, except numbers 7 or 8 which may require a narrative response.
- B. When a "Yes" is indicated on any of numbered items 1 through 6, the applicant must explain the impacts, and for items 1 through 5 any appropriate mitigation measures that will be taken. Use attachments if necessary. If the applicant checks "No," and the District feels there may be potential impacts, the Environmental Checklist must be forwarded to Environmental Services.
- C. If the applicant checks "Yes" for any one item, the occupancy agreement or permit along with the checklist and the applicant's mitigation proposal shall be submitted to MDT Environmental Services.
- D. When the applicant checks a "Yes" item, or the District feels there may be potential impacts, the applicant cannot be authorized to proceed with the proposed work until Environmental Services and/or Transportation Planning, as appropriate, reviews the information and signs the checklist.
- E. Applicant will obtain all necessary permits or authorizations from other entities with jurisdiction prior to beginning installation of the subject utility.

THE FIVE CATEGORIES OF MITIGATION UNDER THE CEQ REGULATIONS

- ♦ Avoiding the impact by not taking certain action or parts of an action
- ♦ Minimizing impacts by limiting the degree or magnitude of the action and its implementation
- ♦ Rectifying the impact by repairing, rehabilitating, or restoring the affected environment
- ♦ Reducing or eliminating the impact over time by preservation and maintenance during the life of the action
- ♦ Compensating for the impact by replacing or providing substitute resources or environments.

**CERTIFICATION
AND
INSPECTION**

Agreement No. _____ Project No. _____

Designation _____ Control No. _____

Utility: _____

Submitted By: _____ Phone: _____

This is to inform your office that the work covered in our Utility Agreement/Permit No. _____ was completed on _____ per plans and conditions of said agreement/permit and will be ready for inspection by the State.

Signed _____

Title _____

=====

The work area covered by your agreement/permit was inspected on _____, 19____ and was found to be in _____ condition.

Signed _____

Title _____

Comments if unsatisfactory:

MONTANA DEPARTMENT OF TRANSPORTATION
ENCROACHMENT PERMIT

(Agreement Number)

(I.D. Number)

(Project Number)

(Maintenance Number)

(Project Name)

(Route)

APPLICATION FOR PERMISSION TO: _____

(Give sufficient detail to permit thorough understanding and submit blue prints or sketches in triplicate.)

Section _____ Township _____ Range _____

1. Name of Applicant: _____
2. Address of Applicant: _____
3. If Applicant is a Corporation, give State of Incorporation and names of President and Secretary: _____
4. Highway survey stations, milepost, distances to centerline, and distance from right-of-way line (in metric units) near which installations or structures will be installed: _____
5. For how long a period is the permit desired?: _____
6. REMARKS: _____

(INSTRUCTIONS CONCERNING USE OF THIS FORM)

Applicant will complete this form in triplicate along with plans, sketches and an environmental checklist and send to the appropriate District Maintenance Chief for review and approval.

A ENVIRONMENTAL CHECKLIST MUST BE COMPLETED BY APPLICANT AND MUST BE ATTACHED TO THIS PERMIT. THE PERMIT MUST NOT BE PROCESSED WITHOUT AN ENVIRONMENTAL CHECKLIST.

IF THE PROPOSED INSTALLATION WILL RESULT IN SIGNIFICANT, PERMANENT OR LONG TERM IMPACTS TO THE TRANSPORTATION NETWORK IN TERMS OF SUBSTANTIAL INCREASE TRAFFIC VOLUMES, WEIGHT OR DELAYS TO TRAFFIC ON STATE ROADWAYS, SUCH AS MAJOR MINES GREATER THAN FIVE ACRES, A RAILROAD AT GRADE CROSSING, RAILROAD UNDER OR OVERPASS, OR STRIP MINES, OR IF THE PROPOSED ACTION HAS PERMANENT IMPACTS TO OTHER FORMS OF TRANSPORTATION (RAIL, TRANSIT, OR AIR MOVEMENT), THE ENCROACHMENT PERMIT MUST BE SUBMITTED TO THE TRANSPORTATION PLANNING DIVISION FOR REVIEW PRIOR TO ISSUANCE OF THIS PERMIT.

Subject to the following terms and conditions, the permit applied for upon the reverse side hereof, is hereby granted:

1. TERM. This permit shall be in full force and effect from the date hereof until revoked as herein provided.
2. FEE. The fee for issuance of this permit is _____.
3. REVOCATION. This permit may be revoked by State upon giving 45 days notice to Permittee by ordinary mail, sent to the address shown herein, however the State may revoke this permit without notice if Permittee violates any of its conditions or terms.

4. COMMENCEMENT OF WORK. No work shall be commenced until Permittee notifies the Maintenance Chief shown in application the date the Permittee proposes to commence work.
5. CHANGES IN HIGHWAY. If State highway changes necessitate changes in structures or installations installed under this permit, Permittee will make necessary changes without expense to State.
6. STATE SAVED HARMLESS FROM CLAIMS. As a consideration of being issues this permit the Permittee, its successors or assigns, agrees to protect the State and save it harmless from all claims, actions or damage of every kind and description which may accrue to, or be suffered by, any person or persons, corporations or property by reason of the performance of any such work, character of materials used, or manner of installations, maintenance and operation, or by the improper occupancy of said highway right-of-way, and in case any suit or action is brought against the State and arising out of, or by reason of, any of the above causes, the Permittee, its successors or assigns, will, upon notice to them of the commencement of such action, defend the same at its sole cost and expense and satisfy any judgment which may be rendered against the State in any such suit or action.
7. PROTECTION OF TRAFFIC. The permittee shall protect the work area with traffic control devices that comply with the Manual of Uniform Traffic Control Devices. The permittee may be required to submit a traffic control plan to the Maintenance Chief for approval, prior to starting work. During work, the Maintenance Chief or designee may require the permittee to use additional traffic control devices to protect traffic or the work area. No road closure shall occur without prior approval from the District Engineer.
8. HIGHWAY AND DRAINAGE. If the work done under this permit interferes in any way with the drainage of the State highway affected, Permittee shall, at the Permittee's expense, make such provisions as the State may direct to remedy the interference.
9. RUBBISH AND DEBRIS. Upon completion of work contemplated under this permit, all rubbish and debris shall be immediately removed and the roadway and roadside left in a neat and presentable condition satisfactory to the State.
10. INSPECTION. The installation authorized by this permit shall be in compliance with the attached plan and the conditions of this permit. The permittee may be required to remove or revise the installation, at sole expense of permittee, if the installation does not conform with the requirements of this permit or the attached plan.
11. STATE'S RIGHT NOT TO BE INTERFERED WITH. All changes, reconstruction or relocation shall be done by Permittee so as to cause the least interference with any of the State's work, and the State shall not be liable for any damage to the Permittee by reason of any such work by the State, its agents, contractors or representatives, or by the exercise of any rights by the State upon the highways by the installations or structures placed under this permit.
12. REMOVAL OF INSTALLATIONS OR STRUCTURES. Unless waived by the State, upon termination of this permit, the Permittee shall remove the installations or structures installed under this permit at no cost to the State and restore the premises to the prior existing condition, reasonable and ordinary wear and tear and damage by the elements, or by circumstances over which the permittee has no control, excepted.
13. MAINTENANCE AT EXPENSE OF PERMITTEE. Permittee shall maintain, at its sole expense the installations and structures for which this permit is granted, in a condition satisfactory to the State.
14. STATE NOT LIABLE FOR DAMAGE TO INSTALLATIONS. In accepting this permit the Permittee agrees that any damage or injury done to said installations or structures by a contractor working for the State, or by any State employee engaged in construction, alteration, repair, maintenance or improvement of the State highway, shall be at the sole expense of the Permittee.
15. STATE TO BE REIMBURSED FOR REPAIRING ROADWAY. Upon being billed therefore Permittee agrees to promptly reimburse State for any expense incurred in repairing surface of roadway due to settlement at installation, or for any other damage to roadway as a result of the work performed under this permit.
16. The Permittee shall not discharge or cause discharge of any hazardous or solid waste by the installation or operation of the facility of a State Right-of-way.
17. The Permittee will control noxious weeds within the disturbed installation area for two (2) years.
18. The use of explosives is prohibited for the installation.
19. Any condition of this permit shall not be waived without written approval of the appropriate District Engineer.
20. OTHER CONDITIONS AND/OR REMARKS. _____

The undersigned "Permittee"
agrees to the terms of this permit,

COMPANY OR CORPORATION

Montana Department of Transportation

_____ Title	_____ (Date)	_____ Title	_____ (Date)
_____ (Signature)		_____ (Signature)	

MONTANA DEPARTMENT OF TRANSPORTATION STRUCTURE ENCROACHMENT PERMIT

(Agreement Number)

(I.D. Number)

(Project Number)

(Maintenance Number)

(Project Name)

(Route)

(Name of Highway Structure)

APPLICATION FOR STRUCTURE ATTACHMENT: _____

(Give sufficient detail to permit thorough understanding and submit blue prints or sketches in triplicate. The application should show method of attachment and alignment of the facility within the right-of-way entering and exiting the structure)

Section _____ Township _____ Range _____

1. Name of Applicant: _____
2. Address of Applicant: _____
3. If Applicant is a Corporation, give State of Incorporation and names of President and Secretary: _____
4. Highway survey stations, milepost, distances to centerline, and distance from right-of-way line (in metric units) near which attachment to the structures will be attached: _____
5. For how long a period is the permit desired?: _____
6. REMARKS OR OTHER CONDITIONS: _____

(INSTRUCTIONS CONCERNING USE OF THIS FORM)

Applicant will complete this form in triplicate along with plans, sketches and an environmental checklist and send to the appropriate District Maintenance Chief for review and approval.

A ENVIRONMENTAL CHECKLIST MUST BE COMPLETED BY APPLICANT AND MUST BE ATTACHED TO THIS PERMIT. THE PERMIT MUST NOT BE PROCESSED WITHOUT AN ENVIRONMENTAL CHECKLIST.

IF THE PROPOSED INSTALLATION WILL RESULT IN SIGNIFICANT, PERMANENT OR LONG TERM IMPACTS TO THE TRANSPORTATION NETWORK IN TERMS OF SUBSTANTIAL INCREASE TRAFFIC VOLUMES, WEIGHT OR DELAYS TO TRAFFIC ON STATE ROADWAYS, SUCH AS MAJOR MINES GREATER THAN FIVE ACRES, A RAILROAD AT GRADE CROSSING, RAILROAD UNDER OR OVERPASS, OR STRIP MINES, OR IF THE PROPOSED ACTION HAS PERMANENT IMPACTS TO OTHER FORMS OF TRANSPORTATION (RAIL, TRANSIT, OR AIR MOVEMENT), THE ENCROACHMENT PERMIT MUST BE SUBMITTED TO THE TRANSPORTATION PLANNING DIVISION FOR REVIEW PRIOR TO ISSUANCE OF THIS PERMIT.

The Structure encroachment permit is approved subject to the following terms:

1. TERM. This permit shall be in full force and effect from the date hereof until revoked as herein provided.
2. The fees for issuance of this permit is _____.

3. **REVOCATION.** This permit may be revoked by State upon giving 180 days notice to Permittee, except in emergency cases and then in no event less than 30 days by ordinary mail, directed to the address shown in the application, but the State may revoke this permit without notice if Permittee violates any of its conditions or terms.
4. **COMMENCEMENT OF WORK.** No work shall be commenced until Permittee notifies the proper District Maintenance Chief shown in the application the date the Permittee proposes to commence work.
5. **CHANGES IN HIGHWAY.** If State highway changes necessitate changes in structures or installations installed under this permit, Permittee will make necessary changes without expense to State.
6. **STATE SAVED HARMLESS FROM CLAIMS.** As a consideration of being issued this permit the Permittee, its successors or assigns, agree to protect the State and save it harmless from all claims, actions or damage of every kind and description which may accrue to, or be suffered by, any person or persons, corporations or property by reason of the performance of any such work, character of materials used, or manner of installations, maintenance and operation, or by the improper occupancy of said highway right-of-way, and in case any suit or action is brought against the State and arising out of, or by reason of, any of the above causes, the Permittee, its successors or assigns, will, upon notice to them of the commencement of such action, defend the same at its sole cost and expense and satisfy any judgment which may be rendered against the State in any such suit or action.
7. The permittee shall protect the work area with traffic control devices that comply with the Manual of Uniform Traffic Control Devices. The permittee may be required to submit a traffic control plan to the District Maintenance Chief for approval, prior to starting work. During work, the District Maintenance Chief or designee may require the permittee to use additional traffic control devices to protect traffic or the work area. No road closure shall occur without prior approval from the District Engineer.
8. **HIGHWAY AND DRAINAGE.** If the work done under this permit interferes in any way with the drainage of the State Highway affected, Permittee shall, at the Permittee's expense, make such provisions as the State may direct to remedy the interference.
9. **RUBBISH AND DEBRIS.** Upon completion of work contemplated under this permit, all rubbish and debris shall be immediately removed and the roadway and roadside left in a neat and presentable condition satisfactory to the State.
10. **INSPECTION.** The installation authorized by this permit shall be in compliance with the attached plan and the conditions of this permit. The permittee may be required to remove or revise the installation, at sole expense of permittee, if the installation does not conform with the requirements of this permit or the attached plan.
11. **STATE'S RIGHT NOT TO BE INTERFERED WITH.** All such changes, reconstruction or relocation shall be done by Permittee so as to cause the least interference with any of the State's work, and the State shall not be liable for any damage to the Permittee by reason of any such work by the State, its agents, contractors or representatives, or by the exercise of any rights by the State upon the highways by the installations or structures placed under this permit.
12. **REMOVAL OF INSTALLATIONS OR STRUCTURES.** Unless waived by the State, upon termination of this permit, the Permittee shall remove the installations or structures installed under this permit and restore the premises to the prior existing condition, reasonable and ordinary wear and tear and damage by the elements, or by circumstances over which the permittee has no control, excepted.
13. **MAINTENANCE AT EXPENSE OF PERMITTEE.** Permittee shall maintain, at its sole expense the installation and structures for which this permit is granted, in a condition satisfactory to the State.
14. **STATE NOT LIABLE FOR DAMAGE TO INSTALLATIONS.** In accepting this permit the Permittee agrees that any damage or injury done to said installations or structures by any State employee engaged in construction, alteration, repair, maintenance or improvement of the State Highway, shall be at the sole expense of the Permittee.
15. **STATE TO BE REIMBURSED FOR REPAIRING ROADWAY.** Upon being billed therefore Permittee agrees to promptly reimburse State for any expense incurred in repairing surface of roadway due to settlement at installation, or for any other damage to roadway or structure as a result of the work performed under this permit.
16. Attachments to existing structures prior to the effective date of these rules are considered to be in compliance with this rule, provided:
 - (a) The owner shall inspect the attachment annually and shall repair any deficiencies. The owner shall maintain a record of the inspections.
 - (b) If the attachment is not currently permitted by a structure attachment permit, the owner shall submit an application for a permit and drawings to the appropriate district office for approval under these rules within six months of the effective date of these rules.
 - (2) **GENERAL**
Where it is feasible and reasonable to locate utility facilities elsewhere, attachment to highway structures will not be allowed. Where other locations create undue hardship for the installation of the facility, consideration will be given to attaching the utility facility to a highway structure. The following conditions will apply:
 - (a) All utility facilities attached to structures shall be attached as provided in this rule unless written approval to do otherwise is granted by the department's bridge engineer.
 - (b) Attachments to structures shall be inspected by the owner at least once per year and the owner shall repair any deficiencies immediately. Records of the inspections shall be maintained by the owner for a minimum of three years.
 - (c) Attachment to longitudinal structures on the Interstate system generally will not be permitted except to exclusively serve a highway facility. Attachments to existing structures crossing the interstate will be considered on a case-by-case basis.
 - (d) The attachment method shall conform to engineering standards for preserving the highway, its safe operation, maintenance and appearance.
 - (e) Attachment of a utility facility will not be permitted unless the structure can support the additional load, and accommodate the utility facility without compromising highway user safety and convenience, and its attachment does not impair bridge inspection or maintenance.

(f) Manholes will not be allowed in the driving lanes of a bridge deck. Where the structure has a minimum shoulder width of 10 feet, manhole access through the deck in the shoulder area may be allowed within the discretion of the Department.

(g) The utility attachment will be installed on the bridge in a manner which will not reduce the vertical clearances above river, stream, pavement or top of a rail.

(h) Utility attachments to the outside of a structure that is located within 440 yards of a residential structure, park, fishing access site, or other recreational facility will not be permitted. A residential structure is any building intended for human occupancy, including businesses. In other areas where, in the opinion of the District Engineer, bridge aesthetics are not a particular concern, a utility may be attached to the outside of the structure. Utilities attached to the outside of the structure will be on the downstream side.

(i) Utility facilities shall be firmly attached to the structure and where necessary padded to eliminate noise and abrasion due to vibrations caused by wind or traffic.

(j) The installation of a utility through the abutment or wing wall of an existing structure shall not be permitted.

(k) In locations where a utility attached to a structure is carried beyond the back of the abutment, the utility shall curve or angle out to its proper alignment outside the roadbed area within the shortest possible distance from the abutment.

(l) Utility facilities may be attached to structures by hangers or roller assemblies suspended from inserts in the underside of the deck or from hanger rods clamped to a flange of a superstructure member.

(i) Bolting through the deck or concrete beams shall not be permitted.

(ii) Welding of attachments to steel members or bolting through such members shall not be permitted.

(iii) The use of anchors driven using the explosive type drilling force shall not be permitted.

(iv) Drilling in prestressed concrete beams shall not be permitted.

(v) Attachments of utilities facilities to bridge handrail or guardrail or their anchorage systems shall not be permitted.

(vi) Attachment of pipelines carrying deleterious or corrosive substances shall not be permitted.

(m) The design of a utility attachment to a highway structure shall include provisions acceptable to the department for lineal expansion and contraction due to temperature changes. Line bends or expansion couplings may be used for this purpose.

(n) Each proposed bridge attachment will be considered on a case-by-case basis by the Department.

(o) Trenching in the vicinity of piers, bents or abutments shall be a sufficient distance from footings to prevent undercutting or material from sloughing from under the footing.

(p) An application which involves the reduction of existing waterway area shall not be permitted.

(q) Utilities attached to bridges shall not be maintained from the bridge deck without the prior approval of the Department's District Engineer.

(r) Utility facilities shall not be attached to bridges on or eligible for listing on the National Register of Historic Places without written consent of the State Historic Preservation Officer.

(s) The owner of the utility facility shall be fully liable to the department for any damage to the structure caused by the placement and use of the facility on a highway structure. If the structure is damaged by the utility facility, through negligence or otherwise, so that the structure can not be used by the traveling public, then the utility must pay all costs to repair the structure, and associated costs.

(t) The department shall not allow any new attachments to a highway structure by petroleum, natural gas, or other products pipelines in seismically active areas (those areas which exceed 10% of gravity) unless the structure has been retrofitted or built in conformity to the department's seismic requirements since January 1, 1992. The department may waive this requirement if the department determines that the structure is adequate for the seismic area within which it is located.

(3) NEW BRIDGE STRUCTURES

(a) Where the Department plans to construct a new structure, the design of the structure will, upon request of a utility company, be reviewed by the Department's Bridge Bureau for accommodation of existing or proposed utility installations consistent with the requirements set forth herein. The utility company may be required to reimburse the state for additional design and construction costs associated with accommodating the utility facility on the new structure.

(b) Installation of a utility facility on a new structure shall be coordinated with the bridge construction so as not to interfere with the operations of the highway contractor.

(c) The applicant shall submit complete plans and specifications of the proposed installation, including the weight per lineal foot and detail drawings to the department prior to the department's completion of plans and specifications for the proposed structure.

(d) Utility facilities may be installed through free standing bridge abutments, but shall not be permitted through abutments or bents that are expected to move as the thermal expansion and contraction affects the bridge. The hole created in the bridge abutment must be of the minimum size necessary to accommodate the utility and it shall be sleeved to permit relative movement between the abutment and utility.

(4) PIPELINES

(a) At the option of the utility pipelines must be attached to a highway structure by one of the following methods:

(i) The carrier line shall be encased throughout the length of the structure and the casing shall be carried beyond, but not through, the bridge abutments and shall be effectively opened or vented at each end. The casing shall be designed to withstand the same internal pressure as the carrier pipe; or

(ii) The carrier line may be attached to the structure unencased using the following design factors:

Class Location 1	0.50
Class Location 2	0.40
Class Location 3	0.33
Class Location 4	0.27

The design factor specified shall be obtained in accordance with the equations set forth in 49 CFR 192 by any combination of wall thickness and/or pipe yield strength that will provide the required design factors. If the design factor is obtained by increasing steel strength, the utility shall provide certification at the time of installation to the department that the pipe, in fact, meets the strength requirements in the design calculations.

(b) The carrier pipe shall be pressure tested before start-up in accordance with the latest edition of applicable industry codes, as well as the applicable statutes and regulations.

(c) The attachment shall be designed to prevent any discharge from damaging the structure or reaching the waterway in the event of a rupture. That capability shall be demonstrated to the satisfaction of the Department's Bridge Engineer prior to approval of the attachment.

(d) Pipelines using bridge members to resist forces generated by fluids in motion shall not be permitted.

(e) The following information shall be included in the application: outside diameter, inside diameter, pipe material, actual working pressure, substance carried, type of coating, and any other information requested by the department.

(f) Pipelines attached to highway structures shall be electrically isolated from the structure.

(g) Pipelines shall be attached to provide sufficient clearance for convenience and safety during maintenance and repair of the structure or other utility attachments on the structure. The pipeline shall be located to minimize the possibility of damage from traffic. Pipelines shall include the capability to allow for expansion and contraction of the structure and the pipeline.

(5) POWER AND COMMUNICATION LINES

(a) Electric power and communication conductors attached to a highway structure shall be insulated from the structure, and carried in protective conduit or pipe throughout the structure. Exposed metallic conduit shall be grounded on each end. Where metallic conduit is installed within seven feet of any metal

parts of the structure which are readily accessible, including, but not limited to, railings, platforms, stairs, the metallic conduit shall be bonded to the metal parts of the structure. When bonding, all sections of the structure shall be bonded to the metallic conduits.

(b) Electrical power and communication lines shall be attached to provide sufficient clearance for convenience and safety during maintenance and repair of the structure or other utility attachments on the structure. The conduit shall be located to minimize the possibility of damage from traffic. Conduits shall allow for the expansion and contraction of the structure.

(c) Attachments shall comply with the National Electrical Safety Code and applicable regulations.

(d) Metallic conduit attached to structures that are cathodically protected shall meet all of the above requirements and shall not adversely affect the cathodic protection of the structure, i.e. insulate the conduit from the soil and use anodes at each end for grounding. Method to be used shall be approved by the department's bridge engineer on a case by case basis.

(6) BRIDGE CLEARANCES

Aerial power or communications lines will not cross over bridges where it is possible to avoid such installations. This is necessary to allow the department sufficient room to operate equipment to maintain bridges. Lateral clearance from a bridge will be sufficient to allow construction and maintenance of the bridge structure. A minimum vertical clearance of 7.5 meters (25 feet) from the top of the bridge rail will be maintained. Horizontal clearance of 7.5 meters (25 feet) will be maintained from the neat lines of the structures

(7) MATERIALS

(a) All attachments to structures shall be constructed from durable materials designed for long service life and be free from routine servicing or maintenance. All materials shall conform to current applicable specifications and codes.

(b) All steel materials used in attaching a utility conduit to a structure shall be stainless or galvanized.

(c) Materials used for attaching a utility facility to the structure shall be compatible with the structural material to eliminate the possibility of corrosion.

The undersigned "Permittee"
agrees to the terms of this permit.

Montana Department of Transportation

COMPANY OR CORPORATION

_____ Title	_____ (Date)	_____ Title	_____ (Date)
_____ (Signature)		_____ (Signature)	

Bridge Engineer - Helena

NO OCCUPANCY AGREEMENT OR PERMIT WILL BE APPROVED UNTIL ALL OF THE CONDITIONS OF THE CHECKLIST HAVE BEEN SATISFIED.
THE ACCURACY OF THE INFORMATION IS THE SOLE RESPONSIBILITY OF THE APPLICANT.

ENVIRONMENTAL CHECKLIST FOR UTILITY INSTALLATION IN RIGHT OF WAY

Project No.: _____ ID: _____ Designation: _____

Proposed Installation Date: _____

Milepost (Station) _____ to Milepost (Station) _____

Utility/Owner Name: _____ Address: _____

Type of Proposed Occupancy: _____

IMPACTS ON THE PHYSICAL ENVIRONMENT (To be completed by Applicant)		
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES (Use attachments if necessary)	
	Yes	No
1. Does the proposed action have an impact on any cultural resource? (Section 106-NHPA)	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the proposed action have an impact on water quality? *	<input type="checkbox"/>	<input type="checkbox"/>
3. Does the proposed project have impacts to wetlands? *	<input type="checkbox"/>	<input type="checkbox"/>
3a. If the answer to number 3 is yes, is a Clean Water Act § 404 permit authorization required?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there documented controversy on environmental grounds? (For instance, has the applicant received a letter or petition from an environmental organization?)	<input type="checkbox"/>	<input type="checkbox"/>
5. Does the proposed project involve hazardous waste site[s]? (Superfund, spills, underground storage tanks, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed installation a portion of a project which may require other governmental permits, licenses, easements, etc.? If the answer is "yes," please describe in detail the full extent of the project and any other permits, licenses, easements, etc., which may be necessary for the utility to acquire. (Use attachments as necessary.)	<input type="checkbox"/>	<input type="checkbox"/>
7. Does the proposed action <u>permanently</u> impact the transportation network in terms of increased traffic volumes, increased weight or increased delays on state roadways?	<input type="checkbox"/>	<input type="checkbox"/>
8. Does the proposed action have <u>permanent</u> impacts on other forms of transportation (rail, transit or air movements)?	<input type="checkbox"/>	<input type="checkbox"/>

* If the answer to 2 or 3 is "yes," please see the Five Categories of Mitigation on page 2 of this form in order to address mitigation measures.

9. Magnitude and significance of potential impacts: To be completed by applicant.

Checklist prepared by:

Applicant

Title

Date

Reviewed for completeness by:

MDT District Representative

Title

Date

Approved by:

Environmental Services

Title

Date

(when items 1, 2, 3, 4, 5 or 6 are checked "Yes")

Transportation Planning

Title

Date

(when items 7 or 8 are checked "Yes")

- A. The applicant shall complete the checklist indicating a "Yes" or "No" for each item, except number 9 which may require a narrative response.
- B. When a "Yes" is indicated on any items numbered 1 through 8, the applicant must explain the impacts, and for items 1 through 5 any appropriate mitigation measures that will be taken. Use attachments if necessary. If the applicant checks "No," and the District feels there may be potential impacts, the Environmental Checklist must be forwarded to Environmental Services.
- C. If the applicant checks "Yes" for any one item, or if the District feels there may be potential impacts, the occupancy agreement or permit along with the checklist and the applicant's mitigation proposal shall be submitted to MDT Environmental Services.
- D. When the applicant checks a "Yes" item, the applicant cannot be authorized to proceed with the proposed work until Environmental Services and/or Transportation Planning, as appropriate, reviews the information and signs the checklist.
- E. Applicant will obtain all necessary permits or authorizations from other entities with jurisdiction prior to beginning installation of the subject utility.

THE FIVE CATEGORIES OF MITIGATION UNDER THE CEQ REGULATIONS

- ♦ Avoiding the impact by not taking certain action or parts of an action
- ♦ Minimizing impacts by limiting the degree or magnitude of the action and its implementation
- ♦ Rectifying the impact by repairing, rehabilitating, or restoring the affected environment
- ♦ Reducing or eliminating the impact over time by preservation and maintenance during the life of the action
- ♦ Compensating for the impact by replacing or providing substitute resources or environments

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Any utility facility placed within highway right-of-way shall comply with the American Disabilities Act requirements.

MDT attempts to provide accommodations for any known disability. Alternative accessible formats of this document will be provided upon request. For further information, call (406) 444-6080 or TDD (406) 444-7696.